

Title (en)
POSITIVE ELECTRODE ACTIVE MATERIAL CONTAINING SPINEL COMPOSITE SOLID SOLUTION OXIDE, METHOD FOR MANUFACTURING SAME, AND LITHIUM SECONDARY BATTERY INCLUDING SAME

Title (de)
POSITIV ELEKTRODENAKTIV MATERIAL MIT SPINELLMISCHFESTLÖSUNGSOXID, VERFAHREN ZUR HERSTELLUNG DAVON UND LITHIUMSEKUNDÄRBATTERIE DAMIT

Title (fr)
MATÉRIAU ACTIF D'ÉLECTRODE POSITIVE CONTENANT UN OXYDE DE SOLUTION SOLIDE COMPOSITE DE SPINELLE, SON PROCÉDÉ DE FABRICATION ET BATTERIE SECONDAIRE AU LITHIUM LE COMPRENANT

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Abstract (en)
The present invention relates to a positive electrode active material containing a spinel composite solid solution oxide, a method for manufacturing same, and a lithium secondary battery including the same. The spinel composite solid solution oxide contains cubic ($P4_{32}$) and face-centered cubic ($Fd-3m$) in an optimized solid solution ratio in the crystal, and a low content of lithium nickel oxide ($Li_{1-x}Ni_xO$) is combined. A positive electrode active material containing the spinel composite solid solution oxide provides excellent output characteristics while having stable cycle-life characteristics according to the type and content of doping elements replacing transition metals, the synthesis temperature, and the amount of impurities generated.

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